Task 459

EXPLOSIVE ORDNANCE DISPOSAL/LOW INTENSITY CONFLICT

CANDIDATE PROJECT SUBMISSIONS

Project Title: Advanced Remote Underwater Search Vehicle (ROV) System

Submitting Organization: COMEODGRU TWO

Supporting Service: Navy

Project Type: EOD MCM

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Threat Environment: Mine Countermeasure (MCM) Ships, Aircraft and EOD Area Search Detachments (ASD) are required to pass position data and mark targets for prosecution by EOD detachments. EOD MCM divers are required to re-acquire and verify the contacts then report to the MCM Commander. Many times these targets turn out to be bottom anomalies or other non-threat objects. In these cases, precious diver bottom time has been wasted. The problem becomes worse as water depth increases. The ASD ROV will be used to help illuminate unnecessary dives and to provide important reconnaissance information prior to necessary dives.

Specific Technical/Operational Need:. A specific need exists for a portable system to reacquire, identify, and assess the condition of previously located underwater targets. System will be able to acquire and visually inspect targets in 300 feet of water with visibility as low as two feet and currents as high as two knots. The ROV must be low cost, one man portable and capable of operating from 6 to 10 meter small craft.

Proposed Technical Approach and Expected Performance: The system will be developed using COTs components and outfitted with a sonar and an acoustic tracking system. The system will be compatible with the ASD small craft from which the ROV can be deployed and vectored to a suspected target using the tracking system. Once within sonar range, the operator can close the ROV on the target using sonar data until a visual of the target

is obtained. Two systems will be procured and fielded immediately after successful testing. There is also a training benefit to the ASD side scan sonar operators - the ROV will provide feedback to their side scan sonar record interpretation skills. System reliability, limited procurement and maintenance costs are primary goals.

<u>Expected Performance:</u> System reliability, limited procurement and maintenance costs are primary goals

Existing Capabilities: None

Estimated Cost: FY99 \$200,000 - FY 00 \$0 -- Total \$ 200,000

Estimated Project Duration: 12 (Months)

Potential Performer (Government):

Potential Performer (Contractor):